



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

Walter Ivey, P.E., Director  
Environmental Engineering Division  
West Virginia Department of Health and  
Human Resources  
350 Capitol Street, Room 313  
Charleston, West Virginia 25301

NOV 23 2011

Dear Mr. Ivey:

Enclosed is the U.S. Environmental Protection Agency Region III (EPA) advanced monitoring review of the West Virginia drinking water program activities in the Public Water System Supervision Program (PWSS) Grant for State Fiscal Year 2011.

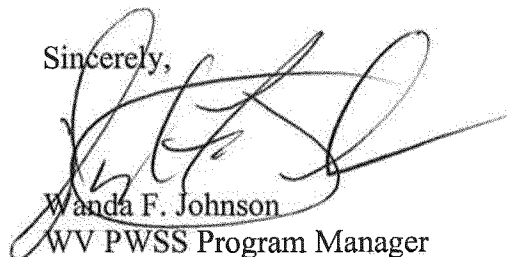
The enclosure consists of a comprehensive report based on my review of the implementation of the WV PWSS grant workplan activities. This review incorporates information from the semi-annual progress reports submitted by the West Virginia Environmental Engineering Division (EED), telephone and email follow-up, communication within EPA covering the PWSS activities from July 1, 2010 through June 30, 2011, and recent on-site interviews conducted by EPA's contractor, CADMUS.

EPA would like to recognize West Virginia's drinking water program on its success in obtaining primacy for the Lead and Copper Rule Short Term Revisions and Ground Water Rule. However EPA does have concern with the high turnover of staff within EED; this is discussed further in the report.

In addition to the shared responsibility placed on responding to acute health contaminants at all public water systems, EPA will focus FY 2012 program activities on the continuation of emergency preparedness, new rule development and adoption, continuation and improvement of operator certification programs and continued improvement of data quality in SDWIS. EPA is committed to working with you on these activities to achieve these goals.

If you have any questions regarding the enclosed review, please do not hesitate to call me at (215) 814-3249.

Sincerely,

  
Wanda F. Johnson  
WV PWSS Program Manager  
Drinking Water Branch

Enclosure



**Review of the  
West Virginia Department of Health and Human Resources  
Bureau of Public Health  
Office of Environmental Health Services  
Environmental Engineering Division  
Federally Funded Drinking Water Activities**

**Introduction**

This review covers the activities conducted under the Public Water System Supervision Program (PWSS) federally funded assistance agreement for the period July 1, 2010 to June 30, 2011. The report is presented in two parts: 1) a discussion of the Environmental Engineering Division (EED) strengths and 2) a discussion of those areas where the EPA has concerns. The report identifies recommendations and action items. WVDHHR is invited to submit an addendum to this report if it deems that such an addendum is necessary to clarify or counter EPA's findings.

**Purpose of Review**

The purpose of this review is to highlight program strengths, areas of progress, and significant accomplishments as well as indicate areas of concern regarding WVDHHR's performance. Where an "Action Item" is identified, EPA will require a response no later than one month after receipt of this report unless specified otherwise. This review is also intended to:

- 1) ensure that the commitments contained in the work plan/application under the grant awards are being performed on schedule,
- 2) ensure that all programmatic terms and conditions are met,
- 3) assess available funding to ensure commitment/activity completion,
- 4) ensure all programmatic, statutory and regulatory requirements are met, and
- 5) ensure equipment purchased under the award is accounted for and properly managed.

**Method of Review**

This report is a summary of reviews of submitted progress reports from WVDHHR for State Fiscal Year 2011, the 2011 WV Assessment from on-site interviews with EPA contractor (CADMUS); and grant draw-downs from EPA's Information Financial Management System. This report also includes commentary also provided from EPA's Drinking Water Branch, the Office of Standards, Assessments and Information Management, the Office of Analytical Services and Quality Assurance, and additional telephone conversations and email follow-up between EPA and WVDHHR.

## Contents of this Report

- PWSS Grant Information
- PWSS Program Activities
- Conclusion, Action Items and Reminders

## Public Water System Supervision (PWSS) Program

### Financial Summary

EPA approved WVDHHR's SFY'11 PWSS grant in the amount of \$829,550. Last partial award was made April 14, 2011. WVDHHR submitted the final FFR for SFY 2011 to EPA on October 3, 2011. A surplus of \$216,142.63 has been reported. EPA has requested de-obligation and recertification of these funds for use by the state which may supplement possible budget cuts of federal state allotments for SFY '12.

### Action Item

EPA will start reporting to EED the status of grant drawdowns and incremental funding as well as the balance of de-obligated funds at the close of grant.

### Future Funding

In light of previous federal budget rescissions and the potential for future federal budget cuts, EPA advises WVDHHR to monitor spending closely. When projecting budgets for future PWSS grants, the state should continue to plan appropriately and utilize funds efficiently. Each year, EPA works closely with WVDHHR to ensure that grant funds can be provided as early as possible for state use. EPA is working closely with the EED to ensure timely submission of semi-annual progress reports and future grant applications.

### Personnel/Staffing

WVDHHR's EED has been experiencing significant staff turnover. The majority of vacancies are due to promotion mobility while some vacancies have been due to retirement or jobs taken outside of WVDHHR. This turnover poses significant challenges in keeping staff sufficiently trained and able to make decisions that are consistent with EED's daily operations and directions. The compliance program has been impacted the greatest. Plans to reorganize include shifting some activities to the district offices.

### Reporting Reminder

WVDHHR is reminded to continue reporting on staffing levels especially where vacancies affect work plan activities (e.g., compliance, conducting training and sanitary surveys). This should be a separate narrative or included in progress reports consisting of: 1) a written summary of the status on filling each vacancy (i.e., reviewing applications, interviewing, etc.) and desired time frame for filling positions; 2) a current organization chart to show stability of staffing levels; and

3) a list showing the funding source for all FTEs (filled and vacant), with positions associated to funding source (i.e., PWSS, DWSRF set-aside grant funds, state funds, etc.).

## **New Regulation Development**

### **Highlight**

WVDHHR's primacy revision request for the Lead and Copper Rule Short Term Revisions and Ground Water Rule was tentatively approved by EPA on June 24, 2010. No comments were received during the public comment period. The state's revised rules became final on July 24, 2010.

## **Groundwater Under the Direct Influence (GUDI) Determinations**

GUDI determinations continue to be a priority for the state. WVDHHR's GUDI status of new systems activated or testing new wells after 2004 are; five (5) CWS, ten (10) NTNCs and thirty-seven (37) TNCs. The recent upsurge in the coal industry activity is the primary factor for the increase in request for NTNC systems.

### **Recommendation**

EPA recommends that WVDHHR conduct GUDI determinations on new water sources prior to these systems going on-line.

### **Reporting Reminder**

Continue to provide status of GUDI determinations for all new sources that became active after January 1, 2004. This information can be provided in the semi-annual progress reports or in a separate report as done previously.

## **Capacity Development**

Program activities continue in accordance with the workplan and at a satisfactory level although they endure staff turnover. On June 2, 2011, EPA approved the implementation of WVDHHR's Capacity Development Program (CDP). Each year a determination is made as to whether the state's program meets EPA guidance. This determination influences the decision to withhold 20% of the state's Drinking Water State Revolving Fund capitalization grant.

WVDHHR submitted to their Governor a report on the efficacy of the CDP and progress made toward improving the TMF capacity of public water systems in West Virginia. The report was submitted by the due date (September 30, 2011) and was made available to the public. An article on the CDP's achievements was published.

## New Systems

The number of active water systems continues to decrease due to consolidation and acquisition by larger water systems. The permitting process for new systems is discouraging small, new water systems and encouraging proposed systems to connect to or to become part of existing, larger, more viable water systems. Through this process, new systems commonly begin to understand how complex running a water system is and partner with or connect to an existing, more viable system when possible. This is effective in preventing formation of non-viable PWSs.

## Existing Systems

Baseline re-assessment for existing water systems is underway. The data from the baseline and triennial assessments are used to measure improvement in system capacity which had previously shown that existing system's assessment activities were having a positive impact on water systems. The re-assessment conducted in 2008 shows that most water systems are addressing some portion of the recommendations provided. Findings of the 2011 assessment will be in the next reporting period.

WVDHHR continues to provide assistance to water systems by conducting Capacity Development Assessments (CDA) - a complete evaluation of their technical, managerial, and financial (TMF) capabilities and needs. WV DHHR provides recommendations to address those needs which will lead to long term viability. The CDP continues to focus on making the reports more "reader friendly" and helpful to the water systems.

Additional assistance provided by WVDHHR to water systems through field staff and the Capacity Development Team include a variety of activities related to the Area Wide Optimization Program, the Consumer Confidence Report, asset management, emergency response plans, Disinfection Byproduct Rule, etc.

## Highlights

As part of the more pro-active assistance approach initiated over the last two fiscal years, WVDHHR began contacting long-term Historic SNCs. These efforts have been coordinated with the enforcement personnel and are typically initiated following their issuance of an Administrative Order (AO).

WVDHHR has continued with its Capacity Assistance Partnership Developing Essential Viability (CAPDEV) outreach initiative. The CAPDEV outreach initiative was created to

## **Operator Certification Program**

### Program Review

On September 30, 2011, EPA approved the implementation of WVDHHR's Operator Certification Program. Each year a determination is made as to whether the state's program meets EPA guidance. This determination influences the decision to withhold 20% of the state's Drinking Water State Revolving Fund capitalization grant.

## Highlights

WVDHHR solicited the assistance of a review committee to conduct an external review on the implementation of their Program. The external review is a requirement of the Operator Certification Guidelines and must be performed by an entity outside of the state program agency. This can be a contractor/consultant, board or committee of stakeholders, etc. A final report was submitted to EPA. Some noteworthy findings of the committee are:

- WVDHHR was commended for the thoroughness of its exam validation process. Utilizing stakeholders to improve this area strengthens the program.
- Recommendation was made to limit the grace period for expired certifications from 1 year to 30 or 60 days. The liability of a water utility employing operators with expired licenses should be considered as well as the issue of promoting professionalism.
- The state's database was commended for its capacity to obtain pertinent information regarding the certified operators in the state.
- The mailing list for the Drips & Drops Newsletter should include the legally responsible authority of each water utility, not just the operator. This would help improve communication to council and public service district (PSD) board members.

Although state budgets nation-wide have affected travel dollars each year to attend workshops and training, WVDHHR continues to show support through attendance at various EPA forums, (i.e., the 2010 National Joint Program Conference for Operator Certification and Capacity Development and the EPA/State Eastern Regional Operator Certification Program Workshops). This reflects the state's commitment to improving the implementation of this Program and supporting EPA's efforts in protecting public health.

Planning has begun for the next EPA/State Eastern Regional Operator Certification Program Workshop, hosted by Region 5 in May 2012. The theme is "Sustainability in Economically Challenging Times."

## Schedule Reminder

Annual Operator Certification Report is due June 30, 2012.

## Source Water Assessment & Protection Programs

Over the past year, WV DHHR has been able to significantly increase the number of source water protection activities implemented in the state. This increase is partly due to the creation of Source Water Protection Technical Help Program (SWPTHP), where consulting engineering firms work with state drinking water systems to emphasize the development of protective strategies and to create a source water protection plan. WV DHHR has also been able to assist many surface water and ground water community public water systems through source water protection grants. Grants providing source water security are among the most popular in the state. WV DHHR also continues to build upon existing and new partnerships and inter-agency alliances in order to strengthen its drinking water and source water protection program.

## Highlights

- WV DHHR's SWPTHP program has gained momentum and has assisted forty three (43) community public water systems with the development of protection plans.
- The City of Vienna, WV was awarded the EPA Region III 2010 Source Water Protection Award.
- WV DHHR's Source Water Team actively participated in meetings with the River Alert Information Network (RAIN), encouraging interstate collaboration.
- WV DHHR participated in ORSANCO and Potomac River Basin Drinking Water Source Protection Partnership meetings and activities.
- WV DHHR provided source water protection signage to public water system's municipalities and non-highway areas.

The Source Water Assessment and Protection (SWAP) Program evaluates new PWS water wells or intakes to assure they are located in areas where contamination threats are minimal. Permits for new public water wells now require an initial survey for potential sources of contamination within 2,000 feet of the proposed well location with site-specific information used when available.

An expression of interest (EOI) contract for implementing wellhead and source water protection activities for community water supplies was awarded to two vendors for work in areas covered by WVDHHR District Offices in St. Albans, Wheeling, Beckley and Kearneysville.

WVDHHR signed a contract with the U.S. Geological Survey (USGS), the West Virginia Department of Environmental Protection (WV DEP) and the West Virginia Geological Survey to study the hydrologic flow in abandoned coal mines in McDowell County.

WVDHHR continues to support the WV DEP Project WET (Water Education for Teachers) by loaning groundwater models out for public education. Project WET includes a summer water workshop for educators and youth ages 5-18.

## Action Items

- The state needs to continue working towards the national 2011 goal which states that 50% of CWS and associated population should be protected through substantial implementation of source water protection strategies.
- EPA would like to be kept informed of Source Water Protection Technical Help Program (SWPTHP) contract work progress.

## Data Management/Data Analysis

WVDHHR continues to submit quarterly updates and cooperate with EPA to alleviate data problems.

With the change to the new Enforcement Targeting Tool (ETT) in July 2010, the criteria for becoming a priority system has changed. Systems that score above 10 are considered a national priority.



During the week of July 7, 2008, EPA assisted in an on-site data verification at WVDHHR's Central Office in Charleston, WV. The state files were very well organized and the support from the state personnel was excellent. A draft report was shared with WVDHHR in October 2008. EPA and WVDHHR discussed details of the report and combined comments were incorporated into the final report that was received by EPA Region III in December 2008 and shared with the state.

### **Concern**

One major concern is implementation for Stage 1 DBPR and LT1 ESWTR which were noted in the report as not being fully implemented by the state. Discrepancies noted for these two rules are for compliance determinations for monitoring and reporting. The state attributes its problems in compliance determinations to a lack of staff and failure to inform compliance officers that they could utilize SDWIS State web release 1.0 (SSWR1) to compute compliance determinations. The compliance determination tool had not been working correctly in SDWIS/State. Since the state did not have the manpower to manually do calculations to determine compliance, violations were not issued.

### **Action Plan**

To address this concern, EPA has provided an in-kind service contract via the DWSRF 10% SetAside to provide various training and develop SOPs (standard operating procedures) for WVDHHR staff on SDWIS-State and National Primary Drinking Water Regulations (NPDWR). The contract will assist WVDHHR with addressing discrepancies from the 2008 on-site data review as well as developing a strategy to fully implementing NPDWR.

The work assignment was approved April 2011. EPA continues to monitor contractor work, review deliverables and ensure WVDHHR's needs are being met.

### **Laboratory Certification**

EPA issued its Annual Certification Status Report of WVDHHR's Drinking Water Laboratory Certification Program on March 10, 2011 for the 2011 calendar year. The state laboratory retains certification for analytical methods of inorganic contaminants (except Asbestos, Cyanide and Thallium), lead and copper contaminants and microbiological techniques. EPA has requested that WVDHHR provide proof of SDWA certification coverage for these parameters.

EPA's Environmental Science Center (ESC) recently updated the listing of key analytical capabilities for primacy based on the Code of Federal Regulations (CFR) with input from the EPA Office of Ground Water and Drinking Water in Cincinnati and the Region 3 Water Protection Division. This listing is in the Lab Certification Manual as an appendix (Appendix E). The revised listing was shared with the Primary State Laboratory (PSL) Directors and with the State SDWA Program Managers.

## Highlight

WVDHHR identified a need for its PSL to be certified to test for Disinfection Byproducts. The state had not had the equipment to test for these contaminants previously. However, EPA agrees with the state that it would be beneficial to have the PSL capable of providing certified results especially if a water system lab is having difficulties or unexplained results that could affect water quality. EPA approved the state's request for \$500,000 which utilized the 15% Set-aside to purchase the equipment. The state lab will provide the normal maintenance and expense to operate the lab equipment.

## Quality Management Plan (QMP)

WVDHHR's Drinking Water Program QMP is valid until December 2015.